

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G01N29/02 B01L3/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G01N B01L A61M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 156 270 A (BUECHLER ET AL) 5 December 2000 (2000-12-05) column 2, lines 6-12 figure 1 column 7, lines 1-53 column 8, line 45 - column 9, line 7 column 14, line 20 - column 21, line 24 column 23, lines 6-36; examples 5,6	1-10, 21, 22
X	US 4 233 029 A (COLUMBUS ET AL) 11 November 1980 (1980-11-11) the whole document	1-10, 21, 22

-/-

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

Z document member of the same patent family

Date of the actual completion of the international search

23 August 2005

Date of mailing of the international search report

01 09. 2005

Name and mailing address of the ISA
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Tiede, R

INTERNATIONAL SEARCH REPORT

 International Application No.
 PCT/US2004 /042455

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 656 428 B1 (CLARK DAVID D ET AL) 2 December 2003 (2003-12-02) column 5, line 10 - column 6, line 47 column 7, lines 1-22 column 7, line 39 - column 10, line 56 column 13, line 20 - column 14, line 29 column 17, lines 11-22 column 26, line 49 - column 27, line 23; figures 1-6	18
X	GB 1 130 593 A (NOVO TERAPEUTISK LABORATORIUM A/S) 16 October 1968 (1968-10-16) page 4, line 3 - page 5, line 94; figures 1-4	27-34
Y		37
X	WO 02/088296 A (BOSTON BIOMEDICA, INC; SCHUMACHER, RICHARD, T; TAO, FENG; LAWRENCE, NA) 7 November 2002 (2002-11-07) page 21, line 10 - page 22, line 15; figures 16a,b	27,35, 36,38,39
Y		37
X	FR 2 612 297 A (PASTEUR DIAGNOSTICS) 16 September 1988 (1988-09-16) page 15, line 9 - page 16, line 28; figures 21,23a-f	35-40

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/US2004 /042455

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☒ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
1-10, 18, 22, 27-40

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1, 21 (part); 2-10, 22

A detection cartridge and method of use comprising a housing, a sensor, a detection chamber with a flow front control feature, and a waste chamber and details about said flow front control means, solving the problem to find alternative embodiments for flow front control means

2. claims: 1 and 21 (part); 11-15, 17, 23-26

A detection cartridge and method of use comprising a housing, a sensor, a detection chamber with a flow front control feature, and a waste chamber and details about said waste chamber, solving the problem to allow waste collection after the liquid passed the detection chamber

3. claims: 1, 21 (part); 16

A detection cartridge and method of use comprising a housing, a sensor, a detection chamber with a flow front control feature, and a waste chamber and a fluid monitor, solving the problem to monitor the fluid flow

4. claims: 18,27-40

A module comprising a housing, an exit seal, a chamber, a plunger, and an input port and a method to use said module

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.

PCT/US2004/042455

Patent document cited in search report		Publication date	Patent family member(s)	Publication date			
US 6156270	A	05-12-2000	US 6019944 A	01-02-2000			
			US 5885527 A	23-03-1999			
			US 5458852 A	17-10-1995			
			AT 242054 T	15-06-2003			
			AU 6579098 A	22-10-1998			
			CA 2284801 A1	08-10-1998			
			DE 69815365 D1	10-07-2003			
			DE 69815365 T2	19-08-2004			
			EP 1019193 A2	19-07-2000			
			JP 3531941 B2	31-05-2004			
			JP 2001526778 T	18-12-2001			
			US 2005136552 A1	23-06-2005			
			WO 9843739 A2	08-10-1998			
			US 2004077103 A1	22-04-2004			
			US 2005112782 A1	26-05-2005			
			US 6767510 B1	27-07-2004			
			US 6271040 B1	07-08-2001			
			US 2002086436 A1	04-07-2002			
			US 6143576 A	07-11-2000			
			AT 219967 T	15-07-2002			
			AU 4596593 A	30-12-1993			
			CA 2113198 A1	09-12-1993			
			CA 2469307 A1	09-12-1993			
			DE 69332072 D1	08-08-2002			
			DE 69332072 T2	24-10-2002			
			EP 1175940 A1	30-01-2002			
			EP 0596104 A1	11-05-1994			
			JP 3451088 B2	29-09-2003			
			JP 6509424 T	20-10-1994			
			WO 9324231 A1	09-12-1993			
			US 4233029	A	11-11-1980	AT 4249 T	15-08-1983
						AT 1366 T	15-08-1982
						CA 1119831 A1	16-03-1982
CA 1129498 A1	10-08-1982						
CA 1133059 A1	05-10-1982						
DE 2963436 D1	16-09-1982						
DE 2964110 D1	30-12-1982						
DE 2965945 D1	25-08-1983						
EP 0014797 A1	03-09-1980						
EP 0010456 A1	30-04-1980						
EP 0010457 A1	30-04-1980						
JP 1196515 C	21-03-1984						
JP 55059326 A	02-05-1980						
JP 58026968 B	06-06-1983						
JP 55074462 A	05-06-1980						
JP 1248146 C	16-01-1985						
JP 55071942 A	30-05-1980						
JP 59021501 B	21-05-1984						
US 6656428	B1	02-12-2003	AU 6524100 A	05-03-2001			
			CN 1556922 A	22-12-2004			
			EP 1250602 A2	23-10-2002			
			JP 2004505231 T	19-02-2004			
			TW 517158 B	11-01-2003			
			WO 0111374 A2	15-02-2001			
GB 1130593	A	16-10-1968	DK 106395 C	30-01-1967			

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.

PCT/US2004/042455

Patent document cited in search report	Publication date	Patent family member(s)	Publication date		
GB 1130593	A	AT	257824 B	25-10-1967	
		BE	680328 A	31-10-1966	
		CH	440560 A	31-07-1967	
		DE	1491785 A1	09-10-1969	
		FR	1478062 A	21-04-1967	
		NL	6605743 A	31-10-1966	
		SE	324209 B	25-05-1970	
WO 02088296	A	07-11-2002	CA	2445587 A1	07-11-2002
			EP	1390466 A1	25-02-2004
			JP	2004536292 T	02-12-2004
			WO	02088296 A1	07-11-2002
			US	2002197631 A1	26-12-2002
FR 2612297	A	16-09-1988	FR	2612297 A1	16-09-1988